

ABSTRACT

1 A low-complexity and low-latency method and apparatus in multicarrier
2 communication systems is used for protection and transmission of the side information
3 related to peak-to-average power ratio (PAPR) reduction. The side information is
4 encoded by an error-correction code and transmitted through a plurality of reserved sub-
5 carriers. Modulation of the coded side information over the reserved sub-carriers is
6 performed separately without re-performing data modulation. Therefore, the invention
7 dramatically reduces implementation complexity. Determination of the related
8 parameters for PAPR reduction can be based on the PAPR level of data modulated signal
9 with slight degradation in PAPR reduction performance or that of transmitted signal with
10 no degradation in PAPR reduction performance.